

# Fact Sheet



## For General Permit Registration (and Permit Renewal) Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-MSWLGP-2011-03300128**  
Application Received: **January 4, 2011**  
Plant Identification Number: **033-00128**  
Permittee: **Meadowfill Landfill, Inc.**  
Mailing Address: **Route 2, Box 68, Bridgeport, WV 26330**

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Physical Location: Bridgeport, Harrison County, West Virginia  
UTM Coordinates: 564.04 km Easting • 4354.44 km Northing • Zone 17  
Directions: From I-79 take Exit 121 (Meadowbrook Road). Turn west onto Meadowbrook Road past the Meadowbrook Mall. Go approximately 1.5 miles and turn right onto Dawson Drive. Follow for approximately 1.5 miles to landfill.

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### Facility Description

The Meadowfill Landfill, Inc. (NAICS 562212, SIC 4953) is comprised of 177.7 acres. Meadowfill Landfill has a total design capacity of 6,457,394 Mg of which 834,248 Mg is inactive capacity, 4,521,009 Mg is active capacity, and 1,102,137 Mg is future capacity. The landfill has the potential to accept 30,000 tons per month.

### Emissions Summary

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Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2009-2010 Actual Emissions
Carbon Monoxide (CO)	179.68	10.04
Nitrogen Oxides (NO <sub>x</sub> )	88.23	2.9
Particulate Matter (PM <sub>10</sub> )	38.85	13.9

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Total Particulate Matter (TSP)	199.96	76.55
Sulfur Dioxide (SO <sub>2</sub> )	10.48	0.45
Volatile Organic Compounds (VOC)	83.58	55.11

*PM<sub>10</sub> is a component of TSP.*

Hazardous Air Pollutants	Potential Emissions	2009-2010 Actual Emissions
Toluene	17.33	6.066
Xylenes	6.14	2.151
Methylene Chloride	5.74	2.008
Perchloroethylene	2.96	1.036
Hexane	2.74	0.9603
Ethylbenzene	2.36	0.082
Total HAPs*	50.84	16.90

*Some of the above HAPs may be counted as PM or VOCs*

Regulated Pollutant other than Criteria & HAP	Potential Emissions	2008 Actual Emission
Non Methane Organic Compounds (NMOC)	226.5 Mg	18.8 Mg
Carbon Dioxide	108,314	40,417
Methane	38,650	12,355

**Non-methane organic compounds (NMOC)** – The current emission rate estimate (calculated for year 2008) is 18.8 Mg/yr. The projected closure year is 2059 with a projected maximum NMOC emission rate estimate of 226.5 Mg/yr. The NMOC emission rate estimates were calculated using EPA's Landfill Gas Emissions Model (LandGEM) software. The values used for k and L<sub>o</sub> were 0.50 year<sup>-1</sup> and 170 m<sup>3</sup>/Mg respectively. The regulatory default NMOC concentration used in the model was 600 ppmv.

### Title V Program Applicability Basis

This facility has a design capacity over 2.5 million megagrams and 2.5 million cubic meters. Also, this facility has the potential to emit over 100 tons per year of VOC and Carbon Monoxide (CO). Due to this facility's design capacity and its potential to emit over 100 tons of criteria pollutants, Meadowfill Landfill, Inc. is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

### Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR6	Open burning prohibited.
	45CSR7	To prevent and control particulate Air Pollution from manufacturing Process operations
	45CSR11	Standby plans for emergency episodes.
	45CSR13	New Source Review permits for stationary sources
	45CSR16	New Source Performance Standards
	45CSR23	To Prevent and Control Emissions from Municipal Solid Waste Landfills
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984
	40 C.F.R. Part 60 Subpart WWW	Standard of Performance for Municipal Solid Waste Landfills
	40 C.F.R. Part 63 Subpart AAAA	Municipal Solid Waste Landfills subject to standards for Hazardous Air Pollutants
	40 C.F.R. Part 61	Asbestos inspection and removal
State Only:	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	45CSR4	No objectionable odors.
	45CSR17	To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and other sources of Fugitive Particulate Matter
	45CSR42	Greenhouse Gas Emissions Inventory Program

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR34 and 45CSR30.

### Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
R13-2666A	11-30-2009	N/A
R13-2596	9-30-2004	N/A

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B" which may be downloaded from DAQ's website.

### **Determinations and Justifications**

Since the last modification the following has changed:

1. A solidification pit was added in 2011. Solidification pit will store flyash and sawdust which will be used to mix with liquid waste to solidify prior to disposal in the landfill. Potential fugitive emission from this solidification pit will be 0.67 TPY. The solidification pit shall be subject to fugitive control requirements in Section 3.0 of the General Permit.
2. Tire Shredder 450 HP Diesel motor (1S) has been taken out and replaced by an electric engine. The electric engine does not have any applicable requirements.

Following is a discussion of applicability and non-applicability of rules mentioned in the general permit that apply to this facility:

1. 45CSR4 – Flares will be installed to control odor. Also according to section 3.1.4 of the general permit, facility has to comply with 45CSR§4-3.1 to control odor.
2. 45CSR6 – Flares are subject to 45CSR6. Compliance of the flares with the allowable particulate matter limit for the flare according to 45CSR§6-4.1 have been explained in the previous permit factsheets/ engineering evaluation.  
Per 45CSR§6-4.3, the visible particulate matter emissions from each flare shall not exceed twenty (20%) percent opacity. Compliance with 45CSR§6-4.3 has been explained in the previous permit factsheets/ engineering evaluation.
3. 45CSR7 – This rule is applicable to the tire shredder included in construction permit R13-2596.
4. 45CSR17 - Facility shall comply with 45CSR17 by complying with sections 3.1.9 and 3.1.10 of the permit.
5. 40 C.F.R. Part 60 Subpart WWW - *Standards of Performance for Municipal Solid Waste Landfills*, and 45CSR23 - *To Prevent and Control Emissions from Municipal Solid Waste Landfills*

This facility is subject to these rules and shall comply with these rules by complying with sections 4.0.1, 4.1.1, 4.1.2 and 4.1.3 of the general permit. The current calculated NMOC emission rate is less than 50 megagrams per year, hence the facility does not have to install a collection and control system that captures the gas generated within the landfill according to 40 C.F.R § 60.752(b)(2).

This facility is subject to these rules according to 40 C.F.R. § 60.750(a) because this landfill commenced construction, reconstruction or modification on or after May 30, 1991. This facility has a design capacity over 2.5 million megagrams and 2.5 million cubic meters; hence the facility has to comply with the following sections of Subpart WWW:

60.752(b) – 60.752(b)(2) is not applicable if NMOC is less than 50 Mg.

60.752(d) – this section addresses the closure of the landfill.

60.753 - this section is not applicable if NMOC is less than 50 Mg.

60.754 – Test methods and procedures.

60.755 - this section is not applicable if NMOC is less than 50 Mg.

60.756 - this section is not applicable if NMOC is less than 50 Mg.

60.757(a) and (b) – reporting requirements for this landfill.

60.757 (c) to (g) - these sections are not applicable if NMOC is less than 50 Mg.

60.758(a) & (f) – Recordkeeping Requirements.

60.758 (b) to (e) - these sections are not applicable if NMOC is less than 50 Mg.

60.759 - this section is not applicable if NMOC is less than 50 Mg.

6. 40 C.F.R. Part 63 Subpart AAAA – A facility is subject to this subpart if the facility meets the criteria in 40 C.F.R. § 63.1935 (a) or (b).

40 C.F.R. § 63.1935 (a) If the facility own or operate a MSW landfill that has accepted waste since November 8, 1987 or has additional capacity for waste deposition and meets any one of the three criteria in paragraphs (a)(1) through (3) of this section:

(1) The MSW landfill is a major source of HAPs.

(2) The MSW landfill is collocated with a major source of HAPs.

(3) The MSW landfill is an area source landfill that has a design capacity equal to or greater than 2.5 million megagrams (Mg) and 2.5 million cubic meters (m<sup>3</sup>) and has estimated uncontrolled emissions equal to or greater than 50 megagrams per year (Mg/yr) NMOC.

This facility is a major source of HAPs.

Hence the facility is subject to 40 C.F.R. Part 63 Subpart AAAA according to 40 C.F.R. § 63.1935 (a).

According to 40 C.F.R. § 63.1955 (a) the facility shall comply with the requirements of 40 CFR Part 60, Subpart WWW.

Because the facility does not operate a bioreactor §§ 63.1947, 63.1952 and 63.1980(c) to (h) of 40 C.F.R. Part 63 Subpart AAAA are not applicable.

7. 40 C.F.R. Part 60 Subpart OOO - § 60.670 Applicability and designation of affected facility.

(a)(1) Except as provided in paragraphs (a)(2), (b), (c), and (d) of this section, the provisions of this subpart are applicable to the following affected facilities in fixed or portable nonmetallic mineral processing plants: each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, enclosed truck or railcar loading station. Also, crushers and grinding mills at hot mix asphalt facilities that reduce the size of nonmetallic minerals embedded in recycled asphalt pavement and subsequent affected facilities up to, but not including, the first storage silo or bin are subject to the provisions of this subpart.

(2) The provisions of this subpart do not apply to the following operations: All facilities located in underground mines; plants without crushers or grinding mills above ground; and wet material processing operations (as defined in §60.671).

This rule is not applicable to this facility because this facility is not a nonmetallic mineral processing plants and the plant do not have any crusher or grinding mill.

8. 40 C.F.R. Part 60 Subpart Kb - Tanks LST001 and LST002 have a capacity greater than or equal to 151 cubic meters (m<sup>3</sup>) and are used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984; hence the tanks are subject to 40 C.F.R. §§ 60.116b (a), (b) and (d). The landfill leachate is mostly water and should have very low VOL vapor pressure (much less than 5.2 kPa); hence, although it appears that the tanks will be subject to 40 C.F.R 60 Subpart Kb, installation of emission controls on the tanks will not be necessary due to low vapor pressure of the VOL being stored.

9. 40 C.F.R. Part 60 Subpart JJJJ – This rule is not applicable because there are no stationary spark ignition (SI) internal combustion engines (ICE) at this facility.
10. 40 C.F.R. Part 60 Subpart IIII - This rule is not applicable because there are no stationary compression ignition (CI) internal combustion engines (ICE) at this facility.
11. 40 C.F.R. Part 60 Subpart KKKK - This rule is not applicable because there is no stationary combustion turbine at this facility.
12. 40 C.F.R. Part 61 Subpart M - Each owner or operator of an active waste disposal site that receives asbestos-containing waste material from a source covered under 40 C.F.R. §§ 61.149, 61.150, or 61.155 shall meet the requirements of 40 C.F.R. § 61.154 as described in the general permit.
13. 45CSR2 – This rule is not applicable because there are no fuel burning units at this facility.
14. 40 C.F.R. Part 63 Subpart ZZZZ – This rule is not applicable because there is no stationary RICE at this facility.
15. There are no Greenhouse Gas Clean Air Act requirements for this facility because this is a renewal Title V permit and there have been no modifications that would have triggered a PSD permit

### Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. 40 CFR64 (CAM) – 12 landfill gas flares or one skid-mounted flare are permitted to control odor. The combined total emissions from these flares have limits for criteria pollutants; these are secondary emissions from the flares. These flares are not used as control devices to achieve compliance with any emission limitations or standards; according to 40 C.F.R. 64.2(a) CAM is not applicable to these flares. The facility does not have a pollutant specific emissions unit with a control device to meet an applicable standard or limit. Therefore, the facility is not subject to the Compliance Assurance Monitoring (CAM) rule.

2. The following tanks are used at the facility; there are no applicable requirements for these tanks:

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed or Modified	Design Capacity	Control Device
T1	T1	Sanitary Waste Water Tank	1999	1,000 gal	None
T10	T10	Diesel Tank	2001	1,200 gal	None
T10b	T10b	New/Lube Oil Tank (15W40)	2001	200 gal	None
T10c	T10c	New/Lube Oil Tank (10W)	2001	200 gal	None
T11	T11	Truck Wash Water Tank	2000	1,500 gal	None
T2	T2	Sanitary Waste Water Tank	1991	1,000 gal	None
T3	T3	MSW Leachate Tank	1993	1,000 gal	None
T3a	T3a	Oil/Water Tank	1993	1,000 gal	None
T3b	T3b	Oil/Water Tank	2003	1,000 gal	None
T4a	T4a	Waste Oil/Used Oil Tank	1993	2,000 gal	None

T4b	T4b	New/Lube Oil (15W40) Tank	1993	500 gal	None
T4c	T4c	Hydraulic Oil/Fluid Tank	1993	500 gal	None
T4d	T4d	New/Lube Oil Tank	1993	275 gal	None
T5	T5	Unleaded Gasoline Tank	1997	1,000 gal	None
T6	T6	Leachate Sump Tank	1995	2,250 gal	None
T7	T7	Leachate Sump Tank	1993	2,250 gal	None
T8	T8	Leachate Sump Tank	1995	2,250 gal	None
T9	T9	Waste Oil/Used Oil Tank	1992	1,200 gal	None
T9f	T9f	New/Lube Oil (15W40) Tank	1997	550 gal	None
T9h	T9h	Waste Oil/Used Oil Tank	1997	205 gal	None

### Request for Variances or Alternatives

None

### Insignificant Activities

Insignificant emission unit(s) and activities are identified in the Title V application.

### Comment Period

Beginning Date: N/A

Ending Date: N/A

All written comments should be addressed to the following individual and office:

U.K.Bachhawat  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

### Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

### **Point of Contact**

U.K.Bachhawat  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1256 • Fax: 304/926-0478

### **Response to Comments (Statement of Basis)**

(**Choose**) Not applicable.

**OR**

Describe response to comments that are received and/or document any changes to the final permit from the draft/proposed permit.